CONTENTS OF VOLUME 464

May 1993

KIMURA Masayuki, LASKER Norman & AVIV Abraham Thapsigargin-evoked changes in human platelet Ca^{2+}, Na^{+}, pH and membrane potential. 1

HOGG R.C., WANG Q. & LARGE W.A. Time course of spontaneous calcium-activated chloride currents in smooth muscle cells from the rabbit portal vein. 15

PENINGTON Nicholas J. & KELLY John S. Ionic dependence of a slow inward tail current in rat dorsal raphe neurones. 33

LAGADIC-GOSSMANN D. & VAUGHAN-JONES R.D. Coupling of dual acid extrusion in the guinea-pig isolated ventricular myocyte to α_1- and β-adrenoceptors. 49

SPIELMANN J.M., LAOURIS Y., NORDSTROM M.A., ROBINSON G.A., REINKING R.M. & STUART D.G. Adaptation of cat motoneurons to sustained and intermittent extracellular activation. 75

PERSSON P.B., EHMKE H., KIRCHHEIM H.R., LEMPINEN M. & NAFZ B. The role of the kidney in canine blood pressure control: direct assessment of the closed-loop gain. 121

BENVENISTE Morris & MAYER Mark L. Multiple effects of spermine on *N*-methyl-D-aspartic acid receptor responses of rat cultured hippocampal neurones. 131

TATSUMI Hitoshi & KATAYAMA Yoshifumi Regulation of the intracellular free calcium concentration in acutely dissociated neurones from rat nucleus basalis. 165

HOWELL John N., CHLEBOUN Gary & CONATSER Robert Muscle stiffness, strength loss, swelling and soreness following exercise-induced injury in humans. 183

SILINSKY E.M. & GERZANICH V. On the excitatory effects of ATP and its role as a neurotransmitter in coeliac neurons of the guinea-pig. 197

YAMAGUCHI K. & OHMORI H. Suppression of the slow K^{+} current by cholinergic agonists in cultured chick cochlear ganglion neurones. 213

KIM Yang In & DUDEK F. Edward Membrane properties of rat suprachiasmatic nucleus neurons receiving optic nerve input. 229

HUA Shao-Ying, NOHMI Mitsuo & KUBA Kenji Characteristics of Ca^{2+} release induced by Ca^{2+} influx in cultured bullfrog sympathetic neurones. 245

KAILA K., VOIPIO J., PAALASMAA P., PASTERNACK M. & DEISZ R.A. The role of bicarbonate in $GABA_A$ receptor-mediated IPSPs of rat neocortical neurones. 273

APTE D.V., EBREY T.G. & DAWSON M. Joan Decreased energy requirement of toad retina during light adaptation as demonstrated by ^{31}P nuclear magnetic resonance. 291

EHARA Tsuguhisa & MATSUURA Hiroshi Single-channel study of the cyclic AMP-regulated chloride current in guinea-pig ventricular myocytes. 307

BAKER M., HOWE James R. & RITCHIE J.M. Two types of 4-aminopyridine-sensitive potassium current in rabbit Schwann cells. 321

CARMIGNOTO Giorgio, CANELLA Roberto, CANDEO Paola, COMELLI Maria Cristina & MAFFEI Lamberto Effects of nerve growth factor on neuronal plasticity of the kitten visual cortex. 343

Flament D., Goldsmith P., Buckley C.J. & Lemon R.N. Task dependence of responses in first dorsal interosseous muscle to magnetic brain stimulation in man. 361

Edwards A. V. & Garrett J.R. Nitric oxide-related vasodilator responses to parasympathetic stimulation of the submandibular gland in the cat. 379

Mengel M.K.C., Jyväsjärvi E. & Kniffki K.-D. Identification and characterization of afferent periodontal Aδ fibres in the cat. 393

Gamble John, Gartside Ivor B. & Christ Frank A reassessment of mercury in silastic strain gauge plethysmography for microvascular permeability assessment in man. 407

Yoon Kong-Woo, Covey Douglas F. & Rothman Steven M. Multiple mechanisms of picrotoxin block of GABA-induced currents in rat hippocampal neurons. 423

Lozovaya Nataliya, Vulfius Catherine A., Ilyin Victor I. & Krasts Igor V. Intracellular ATP modifies the voltage dependence of the fast transient outward K^+ current in *Lymnaea stagnalis* neurones. 441

Warren Gordon L., Hayes Deborah A., Lowe Dawn A. & Armstrong R.B. Mechanical factors in the initiation of eccentric contraction-induced injury in rat soleus muscle. 457

Warren Gordon L., Hayes Deborah A., Lowe Dawn A., Prior Barry M. & Armstrong R.B. Materials fatigue initiates eccentric contraction-induced injury in rat soleus muscle. 477

Ulman Lesley G., Moriarty Mark, Potter Erica K. & McCloskey D.I. Galanin antagonist effects on cardiac vagal inhibitory actions of sympathetic stimulation in anaesthetized cats and dogs. 491

Fryer Martin W. & Zucker Robert S. Ca^{2+}-dependent inactivation of Ca^{2+} current in *Aplysia* neurons: kinetic studies using photolabile Ca^{2+} chelators. 501

Tiffert Teresa, Etzion Zipora, Bookchin Robert M. & Lew Virgilio L. Effects of deoxygenation on active and passive Ca^{2+} transport and cytoplasmic Ca^{2+} buffering in normal human red cells. 529

Olausson Håkan & Norrsell Ulf Observations on human tactile directional sensibility. 545

Cairns S.P., Westerblad H. & Allen D.G. Changes in myoplasmic pH and calcium concentration during exposure to lactate in isolated rat ventricular myocytes. 561

Nielsen J. & Kagamihara Y. The regulation of presynaptic inhibition during co-contraction of antagonistic muscles in man. 575

Ron S., Berthoz A. & Gur S. Saccade–vestibulo-ocular reflex co-operation and eye–head uncoupling during orientation to flashed target. 595

Guenther Elke & Zrenner Eberhart Differences in adaptation between on- and off-centre ganglion cells and rod-mediated cone sensitization in cat retina. 613

Lamb G.D., Stephenson D.G. & Stienen G.J.M. Effects of osmolality and ionic strength on the mechanism of Ca^{2+} release in skinned skeletal muscle fibres of the toad. 629

Zang W.-J., Yu X.-J., Honjo H., Kirby M.S. & Boyett M.R. On the role of G protein activation and phosphorylation in desensitization to acetylcholine in guinea-pig atrial cells. 649

Bergren D.R. & Peterson D.F. Identification of vagal sensory receptors in the rat lung: are there subtypes of slowly adapting receptors? 681

GYÖRKE Sandor Effects of repeated tetanic stimulation on excitation–contraction coupling in cut muscle fibres of the frog. 699

BRODIN Pål, TÜRKER Kemal S. & MILES Timothy S. Mechanoreceptors around the tooth evoke inhibitory and excitatory reflexes in the human masseter muscle. 711

BONHAM A.C., COLES S.K. & MCCRIMMON D.R. Pulmonary stretch receptor afferents activate excitatory amino acid receptors in the nucleus tractus solitarii in rats. 725

KRAFT T.W., SCHNEEWEIS D.M. & SCHNAPF J.L. Visual transduction in human rod photoreceptors. 747